

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) KVC-051.01	Application Number 09/998,944
Applicant Bennett, S.				
Filing Date October 31, 2001			Group Art Unit 2877	JUN 01 2004 PATENT & TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	INDEX DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	
SAT	EA DE 33 05 104 A1	16 Aug 84	German				X
↑	EB FR 2 535 463A	18 May 84	France				
	EC DE 36 15 305 A1	12 Nov. 87	German				X
	ED DE 37 42 201 A1	22 June 89	Germany	X			
	EE EP 0 551 874 A2	21 Jul 93	EPO	X			X
	EF EP 0 586 242 A1	9 Mar. 94	EPO	X			
	EG JP 07209398	11 Aug 95	Japan				
	EH EP 0 686 867 A1	13 Dec 95	European Patent Application				
	EI EP 0 722 081 A2	17 July 96	European Patent Application				
	EJ EP 856 737 A1	5 Aug. 98	EPO				
	EK EP 0 871 009 A1	14 Oct. 98	EPO				
	EL EP 0 872 756 A1	21 Oct. 98	European Patent Application				
	EM WO98/58268 A	23 Dec 98	PCT (corresponds to 6,023,331)				
↓	EN WO00/36425	22 June 00	PCT				
SAT	EO WO00/31551	2 June 00	PCT				

OTHER DOCUMENTS

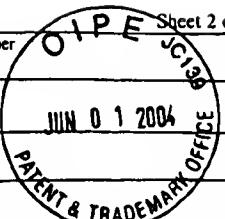
(Including Author, Title, Date, Pertinent Pages Etc.)

SAT	FA	Alekseev et al; "Fiber Optic Gyroscope With Suppression of Excess Noise From the Radiation Source", Technical Physical Letters , 24(9): 719-721, (September 1998)
SAT	FB	Blake et al., "In-Line Sagnac Interferometer Current Sensor," IEEE, pp. 116-121 (1995).

EXAMINER	S.A. TURNER	DATE CONSIDERED 10-6-04
----------	-------------	----------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) KVC-051.01	Application Number 09/998,944
		Applicant Bennett, S.	
		Filing Date October 31, 2001	Group Art Unit 2877

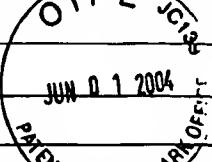
**OTHER DOCUMENTS***(Including Author, Title, Date, Pertinent Pages Etc.)*

SAT	FC	Blake and Szafraniec, "Random Noise in PM and Depolarized Fiber Gyros", OSA Symposium Proceedings, 1997, OWB2, pp. 122-125.
↑	FD	Bohnert. et al., "Field Test of Interferometric Optical Fiber High-Voltage and Current Sensors" SPIE, Vol. 2360 pp. 16-19 (Feb. 1994).
	FE	Bohnert. et al., "Temperature and Vibration Insensitive Fiber-Optic Current Sensor" ABB, Vol. 2360 pp 336-339 (Feb. 1994).
	FF	Burns, et al., "Excess Noise in Fiber Gyroscope Sources", IEEE Photonics Technology Letter, Vol 2, No. 8, August 1990, pp. 606-608.
	FG	Clark et al., "Application of a PLL and ALL Noise Reduction Process in Optical Sensing System," <i>IEEE Translations on Industrial Electronics</i> , Vol. 44, No. 1, February 1997, pp. 136-138
	FH	Dagenais et al., "Low-Frequency Intensity Noise Reduction for Fiber-Optic Sensor Applications," <i>Optical Fiber Sensors Conference</i> , 1992, January 29-31, pp. 177-180
	FI	Dupraz, J.P., "Fiber-Optic Interferometers for Current Measurement: Principles and Technology", Alsthom Review No. 9: 29-44 (December 1987).
	FJ	Frosio, G. and Dändliker, "Reciprocal Reflection Interferometer for a Fiber-Optic Faraday Current Sensor", Applied Optics 33 (25): 6111-6122 (September 1, 1994).
	FK	Gronau Yuval et al.; "Digital Signal Processing For An Open-Loop Fiber-Optic Gyroscope", Applied Optics, Optical Society of America, Washington, U.S., vol. 34, no. 25, 1 September 1995, pgs. 5849-5853
	FL	Killian M. Kevin; " Pointing Grade Fiber Optic Gyroscope", IEEE AES Systems Magazine, pp. 6-10 (July 1994)
	FM	LaViolette and Bossler: "Phase Modulation Control for An Interferometric Fiber Optic Gyroscope", IEEE Plan 90, Position Location and Navigation Symposium, Las Vegas, (March 20-23, 1990)
	FN	Lefevre, "The Fiber-Optic Gyroscope", Artech House, Boston, pp. 29-30 (1993)
	FO	McCallion and Shimazu; " Side-Polished Fiber Provides Functionality and Transparency", Laser Focus World, 34 (9): S19- S24, (September 1, 1998)
	FP	Moeller and Burns, "1.06μm All-fiber Gyroscope with Noise Subtraction, Proceedings of the Conference on Optical Fiber Sensors", IEEE-OSA, Monterey, CA, 1992, pp. 82-85
SAT	FQ	Moeller and Burns, "Observation of Thermal Noise in a Dynamically Biased Fiber-Optic Gyro", Optical Letters, 1996, Vol. 21, pp. 171-173.

EXAMINER	S.A. Turner	DATE CONSIDERED
----------	-------------	-----------------

10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) KVC-051.01	Application Number 09/998,944
		Applicant Bennett, S.	
		Filing Date October 31, 2001	Group Art Unit 2877
			
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Page(s) Etc.)</i>			
SAT	FR	Nikos Drakos, "Circular Polarization States for Light, and Quarter-Wave Plates," <i>Computer Based Learning Unit, University of Leeds</i> (March 2, 1998)	
	FS	Ono et al.; "A Small -Sized, Compact, Open-loop Fibre-Optic Gyroscope with Stabilized Scale Factor", <i>Meas. Sci. Technol.</i> 1: 1078-1083, (1990)	
	FT	Polynkin et al.; "All-Optical Noise-Subtraction Scheme for a Fiber-Optic Gyroscope", <i>Optics Letters</i> , 25(3): 147-149, (February 1, 2000)	
	FU	Rabelo et al.; "SNR Enhancement of Intensity Noise-Limited FOGs", <i>Journal of Lightwave Technology</i> 18(12):2146-2150 (December 2000)	
SAT	FV	Short, S. et al., "Elimination of Birefringence Induced Scale Factor Errors in the In-Line Sagnac Interferometer Current Sensor", <i>Journal of Lightwave Technology</i> 16 (10): 1844-1850 (October 1998).	
EXAMINER	<i>S.A. Turner</i>		DATE CONSIDERED 10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE

Form PTO-1449

**INFORMATION DISCLOSURE CITATIONS
IN AN APPLICATION**
(Use several sheets if necessary)

JUN 8 1 2004

Docket Number (Optional)
KVC-051.01Application Number
09/998,944

Applicant

Bennett, S.

Filing Date
October 31, 2001Group Art Unit
2877**COPY****U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SAT	AAA	4,571,650	2/18/86	Ojima et al.			
↑	AAB	4,603,931	08/05/86	Ruffman			
	AAC	4,615,582	10/07/86	Lefevre et al.			
	4,630,229	12/16/86	D'Hondt				
	AAE	4,630,890	12/23/86	Ashkin et al.			
	AAF	4,637,722	1/20/87	Kim			
	AAG	4,668,264	05/26/87	Dyott			
	AAH	4,669,814	06/02/87	Dyott			
	AAI	4,697,876	10/06/87	Dyott			
	AAJ	4,705,399	11/10/87	Graindorge et al.			
	AAK	4,712,866	12/15/87	Dyott			
	AAL	4,733,938	03/29/88	Lefevre et al.			
↓	AAM	4,740,085	04/26/88	Lim			
SAT	AAN	4,755,021	07/05/88	Dyott			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
SAT	EA	DE 33 05 104 A1	16 Aug 84	German			X
SAT	EB	FR 2 535 463A	18 May 84	France			
SAT	EC	DE 36 15 305 A1	12 Nov. 87	German			X
SAT	ED	DE 37 42 201 A1	22 June 89	Germany	X		
SAT	EE	EP 0 551 874 A2	21 Jul 93	EPO	X		X
SAT	EF	EP 0 586 242 A1	9 Mar. 94	EPO	X		

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

SAT	FA	Alekseev et al; " Fiber Optic Gyroscope With Suppression of Excess Noise From the Radiation Source ", Technical Physical Letters , 24(9): 719-721, (September 1998)
-----	----	---

EXAMINER	S.A. Turaga	DATE CONSIDERED
		10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATIONS IN AN APPLICATION (Use several sheets if necessary)			Docket Number (Optional) KVC-051.01	Application Number 09/998,944
			Applicant Bennett, S.	
			Filing Date October 31, 2001	Group Art Unit 2877

JUN 8 2004

COPY

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SAT	AAO	4,756,589	01/15/86	Bricheno et al.		
	AAP	4,765,739	08/23/88	Koizumi et al.		
	AAQ	4,776,700	10/11/88	Frigo		
	AAR	4,796,993	01/10/89	Sonobe et al.		
	AAS	4,815,817	03/28/89	Levinson		
	AAT	4,842,409	06/27/89	Arditty et al.		
	AAU	4,848,910	07/18/89	Dupraz		
	AAV	4,883,358	11/28/89	Okada		
	AAW	4,887,900	12/19/89	Hall		
	AAX	4,943,132	07/24/90	Huang		
	AAY	5,033,854	07/23/91	Matthews et al.		
SAT	AAZ	5,048,962	09/17/91	Kurokawa et al.		

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
SAT	EG	JP 07209398	11 Aug 95	Japan		English Abstract	
	EH	EP 0 686 867 A1	13 Dec 95	European Patent Application			X
	EI	EP 0 722 081 A2	17 July 96	European Patent Application			
	EJ	EP 856 737 A1	5 Aug. 98	EPO			
	EK	EP 0 871 009 A1	14 Oct. 98	EPO			
	EL	EP 0 872 756 A1	21 Oct. 98	European Patent Application			
	EM	WO98/58268 A	23 Dec 98	PCT (corresponds to 6,023,331)			
	EN	WO00/36425	22 June 00	PCT			
SAT	EO	WO00/31551	2 June 00	PCT			

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

SAT	FB	Blake et al., "In-Line Sagnac Interferometer Current Sensor," IEEE, pp. 116-121 (1995).
-----	----	---

EXAMINER	S.A. Twanga	DATE CONSIDERED
----------	-------------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) KVC-051.01	Application Number 09/998,944	
			Applicant Bennett, S.		
			Filing Date October 31, 2001	Group Art Unit 2877	
U.S. PATENT DOCUMENTS					

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SAT	BA 5,056,919	10/15/91	Arditty et al.			
↑	BB 5,063,290	11/05/91	Kersey			
	BC 5,074,665	12/24/91	Huang et al.			
	BD 5,080,489	01/14/92	Nishikawa et al.			
	BE 5,096,312	03/17/92	Huang			
	BF 5,106,193	04/21/92	Fesler et al.			
	BG 5,133,600	07/28/92	Schröder			
	BH 5,135,555	08/04/92	Coyle, Jr. et al.			
	BI 5,136,235	08/04/92	Brandie et al.			
	BJ 5,289,257	02/22/94	Kurokawa et al.			
	BK 5,289,258	02/22/94	Szafraniec, et al.			
	BL 5,331,404	07/19/94	Moeller et al.			
	BM 5,351,123	09/27/94	Spahlinger			
	BN 5,359,413	10/25/94	Chang et al.			
	BO 5,365,338	11/15/94	Bramson			
	BP 5,406,370	04/11/95	Huang et al.			
	BQ 5,412,471	05/02/95	Tada et al.			
	BR 5,457,532	10/17/95	August et al.			
	BS 5,459,575	10/17/95	Malvern			
	BT 5,469,257	11/21/95	Blake et al.			
↓	BU 5,469,267	11/21/95	Wang			
SAT	BV 5,471,301	11/28/95	Kumagai et al.			

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages Etc.)*

SAT	FC	Blake and Szafraniec, "Random Noise in PM and Depolarized Fiber Gyros", OSA Symposium Proceedings, 1997, OWB2, pp. 122-125.
EXAMINER	S.A. Turca	DATE CONSIDERED 10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATIONS IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) KVC-051.01	Application Number 09/998,944
 COPY			Applicant Bennett, S.	
			Filing Date October 31, 2001	Group Art Unit 2877

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SA T	BW 5,475,772	12/12/95	Hung et al.			
↑	BX 5,493,396	02/20/96	Sewell			
	BY 5,500,909	03/19/96	Meier			
	BZ 5,504,684	04/02/96	Lau et al.			
	CA 5,513,003	04/30/96	Morgan.			
	CB 5,552,887	09/03/96	Dyott			
	CC 5,559,908	09/24/96	August, et al.			
	CD 5,602,642	02/11/97	Bergh et al.			
	CE 5,644,397	07/01/97	Blake			
	CF 5,654,906	08/05/97	Youngquist			
	CG 5,655,035	08/05/97	Burmenko			
	CH 5,682,241	10/28/97	Mark et al.			
	CI 5,696,858	12/09/97	Blake.			
	CJ 5,701,177	12/23/97	Kumagai et al.			
	CK 5,701,376	12/23/97	Shirasaki			
	CL 5,767,509	06/16/98	Cardova et al.			
	CM 5,781,675	07/14/98	Tseng et al.			
	CN 5,854,864	12/29/98	Knoesen et al.			
	CO 5,898,496	04/27/99	Huang et al.			
↓	CP 5,946,097	08/31/99	Sanders et al.			
SA T	CQ 5,953,121	09/14/99	Bohnert et al.			

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

SA T	FD	Bohnert. et al., "Field Test of Interferometric Optical Fiber High-Voltage and Current Sensors" SPIE, Vol. 2360 pp. 16-19 (Feb. 1994).
EXAMINER		DATE CONSIDERED 10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATIONS IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) KVC-051.01	Application Number 09/998,944
			Applicant Bennett, S.	
			Filing Date October 31, 2001	Group Art Unit 2877

JUN 01 2004

COPY**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SAT	CR	5,987,195	11/16/99	Blake			
	CS	6,023,331	02/08/00	Blake et al.			
	CT	6,025,915	02/15/00	Michal, et al.			
	CU	6,047,095	04/04/00	Knoesen et al.			
	CV	6,075,915	6/13/00	Koops et al.			
	CW	6,148,13t	11/14/00	Geertman			
	CX	6,163,632	12/19/00	Rickman et al.			
	CY	6,185,033	02/06/01	Bosc et al.			
	CZ	6,188,811	02/13/01	Blake			
	DA	6,208,775	03/27/01	Dyott			
	DB	6,233,371	05/15/01	Kim et al.			
	DC	6,301,400	10/09/01	Sanders			
	DD	6,307,632	10/23/01	Blake			
	DE	6,351,310	02/26/02	Ernge et al.			
	DF	6,356,351	03/12/02	Blake			
	DG	6,370,289	04/09/02	Bennett			
	DH	6,389,185	01/08/0t	Meise et al.			
	DI	6,396,965	t1/22/00	Anderson			
	DJ	6,434,285	08/t3/02	Blake et al.			
SAT	DK	6,535,654	03/18/03	Goetsche et al.			

OTHER DOCUMENTS*(Including Author, Title, Date, Pertinent Pages Etc.)*

SAT	FE	Bohnert. et al., "Temperature and Vibration Insensitive Fiber-Optic Current Sensor" ABB, Vol. 2360 pp 336-339 (Feb. 1994).
-----	----	--

EXAMINER	<i>S.A. Traxer</i>	DATE CONSIDERED
----------	--------------------	-----------------

10-6-04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) KVC-051.01	Application Number 09/998,944
		Applicant Bennett, S.	COPY JUN 01 2004 Group Art Unit 2877
		Filing Date October 31, 2001	
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages Etc.)</i>			
SOT	FF	Burns, et al., "Excess Noise in Fiber Gyroscope Sources", IEEE Photonics Technology Letter, Vol 2, No. 8, August 1990, pp. 606-608.	
↑	FG	Clark et al., "Application of a PLL and ALL Noise Reduction Process in Optical Sensing System," <i>IEEE Translations on Industrial Electronics</i> , Vol. 44, No. 1, February 1997, pp. 136-138	
	FH	Dagenais et al., "Low-Frequency Intensity Noise Reduction for Fiber-Optic Sensor Applications," <i>Optical Fiber Sensors Conference</i> , 1992, January 29-31, pp. 177-180	
	FI	Dupraz, J.P., "Fiber-Optic Interferometers for Current Measurement: Principles and Technology", Alsthom Review No. 9: 29-44 (December 1987).	
	FJ	Frosio, G. and Dändliker, "Reciprocal Reflection Interferometer for a Fiber-Optic Faraday Current Sensor", Applied Optics 33 (25): 6111-6122 (September 1, 1994).	
	FK	Gronau Yuval et al., "Digital Signal Processing For An Open-Loop Fiber-Optic Gyroscope", Applied Optics, Optical Society of America, Washington, U.S., vol. 34, no. 25, 1 September 1995, pgs. 5849-5853	
	FL	Killian M. Kevin; " Pointing Grade Fiber Optic Gyroscope", IEEE AES Systems Magazine, pp. 6-10 (July 1994)	
	FM	LaViolette and Bossler: "Phase Modulation Control for An Interferometric Fiber Optic Gyroscope", IEEE Plan 90, Position Location and Navigation Symposium, Las Vegas, (March 20-23, 1990)	
	FN	Lefevre, "The Fiber-Optic Gyroscope", Artech House, Boston, pp. 29-30 (1993)	
	FO	McCallion and Shimazu; " Side-Polished Fiber Provides Functionality and Transparency", Laser Focus World, 34 (9): S19-S24, (September 1, 1998)	
	FP	Moeller and Burns, "1.06μm All-fiber Gyroscope with Noise Subtraction, Proceedings of the Conference on Optical Fiber Sensors", IEEE-OSA, Monterey, CA, 1992, pp. 82-85	
	FQ	Moeller and Burns, "Observation of Thermal Noise in a Dynamically Biased Fiber-Optic Gyro", Optical Letters, 1996, Vol. 21, pp. 171-173.	
	FR	Nikos Drakos, "Circular Polarization States for Light, and Quarter-Wave Plates," <i>Computer Based Learning Unit, University of Leeds</i> (March 2, 1998)	
	FS	Ono et al.; " A Small -Sized, Compact, Open-loop Fibre-Optic Gyroscope with Stabilized Scale Factor", Meas. Sci. Technol. 1: 1078-1083, (1990)	
	FT	Polynkin et al.; " All-Optical Noise-Subtraction Scheme for a Fiber-Optic Gyroscope", Optics Letters, 25(3): 147-149, (February 1, 2000)	
↓	FU	Rabelo et al.; " SNR Enhancement of Intensity Noise-Limited FOGs", Journal of Lightwave Technology 18(12):2146-2150 (December 2000)	
SOT	FV	Short, S. et al., "Elimination of Birefringence Induced Scale Factor Errors in the In-Line Sagnac Interferometer Current Sensor", Journal of Lightwave Technology 16 (10): 1844-1850 (October 1998).	
EXAMINER	S.A. Turner		DATE CONSIDERED 10-6-04
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.			

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE